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PATENT APPLICATION

ATTORNEY DOCKET NO. 10981967-2

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Philip J. Kuekes et al

Confirmation No.:

Application No.: 09/280,188

Examiner: D.A. Wille

Filing Date: March 29, 1999

Group Art Unit: 2814

Title: MOLECULAR WIRE TRANSISTORS (MWT)

EV075984904US

COMMISSIONER FOR PATENTS
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

( ) under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)

(X) under 37 CFR 1.97(c) together with either a:
( ) Statement under 37 CFR 1.97(e), or
(X) a $180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs

( ) under 37 CFR 1.97 (d) together with a:
( ) Statement under 37 CFR 1.97(e), and
( ) a petition under 37 CFR 1.97(d)(2), and
( ) a $180.00 petition fee set forth in 37 CFR 1.17(p).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of $180.00 . At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

(X) Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

( ) A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. EV 075984904

Date of Deposit April 15, 2002

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Washington, D.C. 20231.

By Mukta Bast Christerk

Respectfully submitted,

Philip J. Kuekes et al

By David W. Collins

David W. Collins

Attorney/Agent for Applicant(s)

FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO. 10981967-2	SERIAL NO. 09/280,188
	APPLICANT Kuekes et al	
	FILING DATE March 29, 1999	GROUP

REFERENCE DESIGNATION **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	1A	3,975,623	8/17/76	Weinberger	235	152
	1B	4,208,728	6/17/80	Blahut et al	365	154
	1C	5,475,341	12/12/95	Reed	327	566
	1D	5,729,752	3/17/98	Snider et al	395	800
	1E	5,790,771	8/4/98	Culbertson et al	395	182.01
	1F	5,640,343	6/17/97	Gallagher et al	365	171
	1G	5,519,629	5/21/96	Snider	364	490
	1H					
	1I					
	1J					
	1K					

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	TRANSLATION YES	TRANSLATION NO
	1L							
	1M							
	1N							
	1O							
	1P							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	1R	J.R. Heath et al, "A Defect-Tolerant Computer Architecture: Opportunities for Nanotechnology", Science, Vol. 280, pp. 1716-1721 (June 12, 1998)
	1S	L. Guo et al, "Nanoscale Silicon Field Effect Transistors Fabricated Using Imprint Lithography", Applied Physics Letters, Vol. 71, pp. 1881-1883 (September 29, 1997)
	1T	A.M. Morales et al, "A Laser Ablation Method For The Synthesis Of Crystalline Semiconductor Nanowires", Science, Vol. 279, pp. 208-268 (January 9, 1998)

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	2A					
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	2L							
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	2R	J.R. Heath et al, "A Liquid Solution Synthesis Of Single Crystal Germanium Quantum Wires", Chemical Physics Letters, Vol. 208, No. 3, 4, pp. 263-268 (June 11, 1993)
	2S	V.P. Menon et al, "Fabrication and Evaluation Of Nanoelectrode Ensembles", Analytical Chemistry, Vol. 67, pp. 1920-1928 (July 1, 1995)
	2T	L. Guo et al, "A Silicon Single-Electron Transistor Memory Operating At Room Temperature", Science, Vol. 275, pp. 649-651 (January 31, 1997)

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	3L							
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	3R	S.J. Tans et al, "Room-Temperature Transistor Based On A Single Carbon Nanotube", Nature, Vol. 393, pp. 49-52 (May 7, 1998)
	3S	K.K. Likharev, "Correlated Discrete Transfer Of Single Electrons In Ultrasmall Tunnel Junctions", IBM Journal of Research and Development, Vol. 32, No. 1, pp. 144-158 (January 1998)
	3T	R.E. Jones Jr., et al, "Ferroelectric Non-Volatile Memories For Low-Voltage, Low-Power Applications", Thin Solid Films, Vol. 270, pp. 584-588 (December 1, 1995)

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	4R	D.B. Amabilino et al, "Aggregation Of Self-Assembling Branched [n]-Rotaxanes", New Journal of Chemistry, Vol. 22, No. 9, pp. 959-972 (September 11, 1998)
	4S	T. Vossmeyer et al, "Combinatorial Approaches Toward Patterning Nanocrystals", Journal of Applied Physics, Vol. 84, No. 7, pp. 3664-3670 (October 1, 1998)
	4T	D.V. Leff et al, "Thermodynamic Control Of Gold Nanocrystal Size: Experiment And Theory", The Jouranl of Physical Chemistry, Vol. 99, pp. 7036-7041 (May 4, 1995)

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	5M							
	5N							
	5O							
	5P							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	5R	J.D.L. Holloway et al, "Electron-Transfer Reactions Of Metallocenes: Influence Of Metal Oxidation State On Structure And Reacivity", Journal of the American Chemical Society, Vol. 101, pp. 2038-2044 (April 11, 1979)
	5S	C. Mead et al, "Introduction to VLSI Systems", Addison-Wesley, Ch. 3, Section 10, pp. 79-82 (1980)
	5T	C.P. Collier et al, "Electronically Configurable Molecular-Based Logic Gates", Science, Vol. 285, pp. 391-394 (July 16, 1999)